Gaming Report November 16, 1999

- Rerunning Scenario 1b:
 - New methodology in place to fix DWRSIM/ Daily Model Differences.
 - Ecosystem gets b(2) and E/I relaxations.
 - Users get everything else Shasta expansion, Banks at 10.3, Delta storage, groundwater storage, demand shifting, water purchases, efficiency
 - Have completed 1981, 1982 to date.
 - Hope to run at least 10 years.
- Interpretation of results
 - Export results may be compared to other DWRSIM results for same period -- e.g., WQCP
 - Biological implications may be measured by comparison to template or by looking at actual take/ flow pattern changes.
 - WQ has not been addressed in most recent gaming

Results

- Very Preliminary
- Increased Banks, JPOD allows faster SLR fill. Sometimes improves fish protection.
- Increased SOD storage extends fill period (and reduces bio benefits of expanded Banks).
- Higher pumping levels increase take and b(2) cost to reduce exports.
- Scenario 1b had significant export increases in the years analyzed to date, compared to current conditions or Accord.
- No firm biological results to date. Template priorities A and B largely met for 1981 and 1982, but adequacy of b(2) during wetter years seems questionable.
- High utility seen to supplementation through EWA.
- Utility of other new assets (Groundwater storage, Delta storage, purchases, Shasta expansion, demand shifting, efficiency).

Questions

- Numerous assumptions made in b(2) accounting. Could use guidance.
 - Ignoring cross-year linkages due to changes in storage in belief that JPOD will minimize problems. Can perform post hoc analysis to confirm whether valid.
 - Assumes b(2) WQCP impacts are calculated relative to current infrastructure/ regulations.
 Improvements that would reduce WQCP impacts do not reduce assessment.
 - Ignores phenomenon where b(2) causes delivery uncertainty which causes reduced allocations (increased SOD storage/ JPOD/ 10.3 may reduce this problem in any case).
 - Charge most actions to b(2), even if impacts made up within season.
- Whether to include explicit WQ operational shifting.

Next Steps

- Finish scenario 1b.
- Either run
 - Scenario 1a (beginning of Stage 1) or
 - Scenario 1b, adding some EWA assets to fill in gaps
- Complete biological analysis for all runs
- Supply analysis
- Asset analysis
- WQ analysis.